Abstract: A rotary heat exchanger includes an evaporation chamber in which sprayers spray a feed liquid to be purified onto the surfaces of heat-exchange members, which heat it and cause some of it to evaporate. The remaining, un-evaporated feed liquid is collected by a rapidly spinning sump, from which scoops skim the spinning sump liquid and direct it back to the sprayers. To make the rate at which feed liquid is supplied to the heat exchanger match that at which the sprayed liquid evaporates, a regulator bases its control of a flow-controlling valve's flow resistance on the internal pressure that prevails in one of the scoops.
(88) Date of publication of the international search report:
7 January 2010
<table>
<thead>
<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>US 2005/0121302 A1 (ZEBUHR) 09 June 2005 (09.06.2005), entire document especially para[0010], [0015], [0031], [0033], [0036], [0043], [0044], [0046], [0056], [0082]</td>
<td>1-16</td>
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<td>Y</td>
<td>US 4,440,114 A (TUTTLE) 03 April 1984 (03.04.1984), col 1, in 51-53, col 3, in 17, 23-25, 28, 43-45, 50-57, col 4, in 17-18, and Fig. 1</td>
<td>1-16</td>
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<tr>
<td>Y</td>
<td>US 2,514,632 A (FLUBACKER) 11 July 1950 (11.07.1950), col 4, in 18-19, 49-52, 56-58, col 5, in 6, 8-9, 24-25, and Fig. 1</td>
<td>3-8, 12, 13, 15</td>
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Further documents are listed in the continuation of Box C.

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Date of the actual completion of the international search: 24 April 2009 (24.04.2009)

Date of mailing of the international search report: 05 MAY 2009

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